

## INFORMAȚII PERSONALE

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<https://www.webofscience.com/wos/author/record/865985>

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 EXPERIENȚA PROFESIONALĂ  
ÎN ÎNVĂȚĂMÂNTUL SUPERIOR

2020 - prezent	<b>Profesor universitar</b> Departamentul Material Rulant de Cale Ferată, Facultatea de Transporturi Universitatea Politehnica din București Universitatea Națională de Știință și Tehnologie Politehnica București
2018 - prezent	<b>Conducător de doctorat, Domeniul Inginerie Mecanică</b> Școala Doctorală Inginerie Mecanică și Mecatronică (2021 – prezent) Școala Doctorală Transporturi (2018 – 2021) Universitatea Politehnica din București Universitatea Națională de Știință și Tehnologie Politehnica București
2021 - prezent	<b>Responsabil program de studii universitare de masterat</b> Fenomene de interacțiuni vehicul – cale de rulare, Facultatea de Transporturi Universitatea Politehnica din București Universitatea Națională de Știință și Tehnologie Politehnica București
2018 - 2020	<b>Conferențiar universitar</b> Departamentul Material Rulant de Cale Ferată, Facultatea de Transporturi Universitatea Politehnica din București
2016 - 2018	<b>Șef lucrări</b> Departamentul Material Rulant de Cale Ferată, Facultatea de Transporturi Universitatea Politehnica din București
2007 - 2016	<b>Asistent universitar</b> Departamentul Material Rulant de Cale Ferată, Facultatea de Transporturi Universitatea Politehnica din București
2005 - 2007	<b>Asistent universitar suplinator</b> Departamentul Material Rulant de Cale Ferată, Facultatea de Transporturi Universitatea Politehnica din București

## TITLURI ȘI DIPLOME

2018	<b>Atestat de Abilitare, Domeniul Inginerie Mecanică</b>
2014	<b>Diplomă de Doctor în Științe Inginerești, Domeniul Ingineria Transporturilor,</b> Universitatea Politehnica din București
2007	<b>Diplomă de Master, Domeniul Inginerie Mecanică,</b> <b>Specializarea Vehicule Feroviare pentru Mari Viteze</b> Universitatea Politehnica din București
2005	<b>Diplomă de Inginer, Domeniul Inginerie Mecanică,</b> <b>Specializarea Material Rulant de Cale Ferată</b> Universitatea Politehnica din București

## REALIZĂRI PROFESIONALE

Publicații	9 cărți de specialitate și cursuri universitare, 9 îndrumare de laborator, 154 de articole științifice: 51 de articole cotate/indexate Web of Science; 50 de articole indexate în alte baze de date internaționale; 10 articole în reviste de specialitate neindexate; 43 de articole în proceedings-uri neindexate.
Proiecte/ Granturi de cercetare	15 proiecte/granturi de cercetare: 2 proiecte obținute prin competiție națională - director de proiect, 1 grant obținut prin competiție internă UPB - director de proiect; 11 proiecte obținute prin competiție națională - membru în echipa de cercetare; 1 proiect cu mediul economic - membru în echipă.
Proiect de dezvoltare instituțională	4 proiecte de dezvoltare instituțională – membru în echipă

## ACTIVITĂȚI RELEVANTE

- Membru în Corpul de experți din Registrul Național al Experților pentru certificarea activității de cercetare – dezvoltare din cadrul Ministerului Cercetării, Inovării și Digitalizării
- Membru în Echipa de Evaluatori Naționali – Domeniul Inginerie, Ministerul Educației Naționale, Agenția de Credite și Burse de Studii (ACBS)
- Expert evaluator – Competiția “Public Tender and Grant Projects in Research, Experimental Development, and Innovation Standard Projects – 2022”, organizată de Czech Science Foundation (în Czech “Grantová agentura České republiky – GACR”)
- Expert evaluator – Competiția internă Granturi de excelență ULBS-HPI/ Excellence Research Grants – ERG 2020 (LBUS-HPI-ERG-2020), Universitatea “Lucian Blaga” din Sibiu
- Expert evaluator - Unitatea Executivă pentru Finanțarea Învățământului Superior a Cercetării, Dezvoltării și Inovării (UEFISCDI), Competiția « Program de Stat » (2020-2023), organizată de Agenția Națională pentru Cercetare și Dezvoltare din Republica Moldova, în domeniile: *Mediu și Schimbări Climatice; Competitivitate economică și tehnologii inovative*
- Membru fondator - Societatea Română de Mecanică Teoretică și Aplicată (SRMTA)
- Academic Editor, Shock and Vibration
- Academic Editor, Mathematical Problems in Engineering
- Academic Editor, Advances in Mechanical Engineering
- Topical Advisory Panel Member, *Electronics*
- Membru în Comitetul Editorial, *Journal of Advanced Mechanical Engineering*
- Membru în Comitetul Editorial, *International Journal of Engineering & Technology for Automobile Security*
- Members în Comitetul Editorial, *Romanian Journal of Transport Infrastructure*
- Membru în Comitetul Editorial, *Technium: Romanian Journal of Applied Sciences and Technology*
- Membru în Comitetul Editorial, *Journal of Human-centric Science and Technology Innovation*
- Membru în Comitetul Editorial, *Journal of Science and Engineering Management*
- Membru în Comitetul Editorial, *Journal of Modern Industry and Manufacturing*
- Referent științific pentru reviste indexate Web of Science:
  - Journal of Sound and Vibration
  - Vehicle System Dynamics
  - International Journal of Mechanical Sciences
  - Energy
  - Applied Acoustics
  - Applied Sciences
  - Scientific Reports
  - Sensors
  - Materials
  - Symmetry
  - Shock and Vibration
  - International Journal of Heavy Vehicle Systems
  - Journal of Advanced Transportation
  - Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit
  - Advances in Mechanical Engineering
  - Advances in Civil Engineering
  - Measurement and Control
  - Measurement
  - Journal of Zhejiang University - Science A, Applied Physics & Engineering
  - Journal of Low Frequency Noise, Vibration & Active Control
  - Journal of Mechanical Science and Technology
  - Mechanical Systems and Signal Processing
  - Mechanical Sciences
  - IEEE Transactions on Intelligent Transportation Systems
  - IEEE Transactions on Vehicular Technology
  - Journal of Dynamic Systems, Measurement and Control
  - International Journal of Rail Transportation
  - Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science
  - Mechanics Based Design of Structures and Machines
  - Applied Artificial Intelligence
  - Energies
  - Processes
  - Reviews on Advanced Materials Science
  - Electronics
  - Soils and Foundations

## ACTIVITĂȚI RELEVANTE

- Referent științific pentru reviste indexate Web of Science:
  - Machines
  - Sustainability
  - Actuators
  - Structures
  - Agriculture
  - Mathematics
  - Mathematical Problems in Engineering
  - Discrete Dynamics in Nature and Society
  - Journal of the Chinese Institute of Engineers
  - Advanced Composites Letters
  - Axioms
  - World Electric Vehicle Journal
  - Modelling and Simulation in Engineering
  - Journal of Engineering
  - Infrastructures
  - Fluids
  - Vehicles
  - Transportation Safety and Environment
  - Archive of Mechanical Engineering
  - International Journal of Rotating Machinery
  - Transport Problems
  - Acta Polytechnica
  - SN Applied Sciences
- Referent științific la reviste indexate în alte baze de date internaționale:
  - Journal of Open Innovation: Technology, Market, and Complexity
  - Journal of Mechanical Design and Vibration
  - American Journal of Vehicle Design
  - American Journal of Mechanical Engineering
  - Journal of Advanced Mechanical Engineering
  - Design
  - Applied Mechanics
  - International Journal of Ambient Energy
  - Future Transportation
- Membru în Comitetul științific:
  - 9th International Conference on Information Science, Computer Technology and Transportation (ISCTT), Jun. 28 - 30, 2024, Mianyang, China
  - 8th International Conference on Information Science, Computer Technology and Transportation (ISCTT2023), April 14-16, 2023, Wuhan, China
  - 6th International Conference on Electrical, Automation and Mechanical Engineering (EAME2022), September 17-18, 2022, Guangzhou, China
  - International Conference on Computer Technology and Media Convergence Design (CTMCD 2021), April 23 – 25, 2021, Sanya, China
  - 2021 International Conference on Green Energy, Environment and Computer Application (GEECA2021), September 17-18, 2022, Guangzhou, China.
  - 2021 International Conference on Energy Materials and Environment Engineering (EMEE2021), December 22-23, 2022, Sanya, China
  - 3rd International Conference on Energy, Power and Environmental System Engineering (ICEPESE2022), April 25-26, 2022, Shanghai, China
  - 2nd International Conference on Advanced Energy, Power and Electrical Engineering (AEPEE2022), March 6-7, 2022, Beijing, China
  - 7th Annual International Workshop on Materials Science and Engineering (IWMSE 2021), May 21 - 23, 2021, Changsha, Hunan, China
  - 2021 International Conference on Big Data, Artificial Intelligence and Risk Management (ICBAR 2021), Nov. 5 – 7, 2021, Shanghai, China,
  - 2021 International Conference on Mechanical, Automation and Computer Engineering (ICMACE2021), June 29-30, 2021, Chengdu, China
  - 2021 International Conference on Control, Automation and Intelligent Computing (CAIC 2021), May 28-29, 2021, Beijing, China
  - 9th Annual International Conference on Material Science and Engineering (ICMSE 2021), July 23-25, 2021, Guiyang, Guizhou, China
  - 6th International Conference on Information Science, Computer Technology and Transportation (ISCTT 2021), November 26-28, 2021, Xishuangbanna, China

## ▪ Membru în Comitetul științific:

- International Workshop on Environmental Science and Renewable Energy Engineering (ESREE2021), April 11-12, 2021, Beijing, China
- 3rd International Conference on Energy, Power, Environment and Computer Application (ICEPECA2021), December 17-18, 2021, Xiamen, China
- 4th International Conference on Energy and Power Engineering (EPE2021), September 17-18, 2021, Guangzhou, China
- 9th annual International Conference on Material Science and Environmental Engineering (MSEE 2021), November 26th-28th, 2021, Xiamen, Fujian, China
- International Conference on Advanced Energy, Power and Electrical Engineering (AEPEE2021), April 11-12, 2021, Beijing, China
- 5th International Conference on Electrical, Automation and Mechanical Engineering (EAME2021), April 11-12, 2021, Beijing, China
- 3rd International Conference on Electrical and Electronic Engineering (EEE2021), February 2-3, 2021, Changsha, China
- 2021 International Conference on Power, Energy, Electrical, and Mechanical Engineering (PEEME2021), September 26-27, 2021, Beijing, China
- The International Seminar on Transportation (ISCTT-IST 2020), November 13 - 15, 2020, Shenyang, China
- International Conference on Big data, Wireless Communication and Signal Processing (BDWCSP2020), November 23-24, 2020, Bangkok, Thailand
- 8th annual International Conference on Material Science and Environmental Engineering (MSEE 2020), November 20-21, 2020, Chengdu, Sichuan, China
- 5th International Conference on Information Science, Computer Technology and Transportation (ISCTT 2020), November 13-15, 2020, Shenyang, China
- 2020 International Conference on Applied Social Science and Computational Science (ASSCS2020), September 20-21, 2020, Shanghai, China
- TECHNIUM International Conference 2020, May 30, 2020, Constanța, România
- 2020 International Conference on Intelligent Computing, Communication and Data Engineering (ICCDE2020), November 22-23, 2020, Beijing, China
- 7th International Symposium on Innovation & Sustainability of Modern Railway (ISMR' 2020), October 23-25, 2020, Nanchang, China
- 8th Annual International Conference on Material Science and Engineering (ICMSE2020), August 14-15, 2020, Guiyang, Guizhou, China - 2nd International Conference on Electronical, Mechanical and Materials Engineering (ICE2ME2020), December 20-21, 2020, Xiamen, China
- 3rd International Conference on Applied Mathematics, Modeling and Simulation (AMMS2020), July 12-13, 2020, Shanghai, China
- 3rd International Conference on Energy and Power Engineering (EPE2020), July 12-13, 2020, Shanghai, China
- 2nd International Conference on Energy, Power, Environment and Computer Application (ICEPECA2020), November 22-23, 2020, Beijing, China
- 4th International Conference on Electrical Automation and Mechanical Engineering (EAME2020), May 15-17, 2020, Beijing, China
- TECHNIUM International Conference 2019, December 15, 2019, Constanța, România
- International Conference on Intelligent Transportation and Vehicle Engineering (ICITVE 2019), December 6-8, 2019, Chongqing, China
- International Conference on Intelligent Transportation and Vehicle Engineering (ICITVE 2019), December 6-8, 2019, Chongqing, China
- International Conference on Frontiers Technology of Information and Computer (ICFTIC 2019), September 20-22, 2019, Dalian, China
- 4th International Conference on Information Science, Computer Technology and Transportation (ISCTT 2019), November 29-December 1, 2019, Harbin, China
- The 3rd International Conference on Information Science, Computer Technology and Transportation (ISCTT 2018), December 28-30, 2018, Xi'an, China
- 2017 International Workshop on Materials Science and Mechanical Engineering (IWMSME 2017), October 27th -29th, 2017, Kunming, Yunnan, China
- 3rd Annual International Conference on Advanced Material Engineering (AME 2017), April 14-16, 2017, Shanghai, China
- 2nd International Conference on Environmental Science and Energy Engineering (ICESEE2017), January 15 to 16, 2017, Beijing, China
- International Conference on Advanced Material Science and Engineering (AMSE2017), February 24th-26th, 2017, Shenzhen, China

## ACTIVITĂȚI RELEVANTE

- Membru în Comitetul științific:
  - International Conference on Advanced Education and Management Science (AEMS2017), March 26-27, 2017, Bangkok, Thailand
  - 3rd Annual International Workshop on Material Science and Engineering (IWMSE2017), Guangzhou, September 8-10, 2017, Guangdong, China
  - 3rd Annual International Workshop on Material Science and Engineering (IWMSE2017), , September 8-10, 2017, Guangzhou, Guangdong, China
  - International Conference on Materials Science and Engineering Application (ICMSEA 2017), April 21-23, 2017, Nanjing, China
  - 2nd International Conference on Sustainable Energy and Environmental Engineering (SEEE2016), December 18-19, 2016, Xiamen, China

## RECUNOAȘTEREA PRESTIGIULUI

## Premii și distincții

- Diplomă de Excelență, ca recunoaștere a contribuției aduse la dezvoltarea patrimoniului literar științific românesc, Editura Matrix Rom, București, 2013.
- Medalia de bronz la 5<sup>th</sup> European Exhibition of Creativity and Innovation (EUROINVENT 2013) - Tehnical-Scientific, Artistic and Literary Book Salon pentru cartea de specialitate *Metode și proceduri de cercetare experimentală și încercare a vehiculelor feroviare*, autori Traian Mazilu, Mădălina Dumitriu, publicată la Editura Matrix Rom, 2012.
- 7 articole premiate prin Programul „Resurse umane, Sub-program „Premierea rezultatelor cercetării - Articole” (PN-IV-RU-SUPPORT-PRECISI-2023-1, PN-III-DCD-RU-PRECISI-2021-6, PN-III-DCD-RU-PRECISI-2021-6, PN-III-DCD-RU-PRECISI-2017-2, PN-II-RU-PRECISI-2012-6, PN-II-RU-PRECISI-2011-5):
  - Mădălina Dumitriu, *Condition monitoring of the dampers in the railway vehicle suspension based on the vibrations response analysis of the bogie*, Sensors, Vol. 22, Issue 9, 2022, 3290.
  - Mădălina Dumitriu, Ioana Izabela Dihoru, *Influence of bending vibration on the vertical vibration behaviour of railway vehicles carbody*, Applied Sciences, Vol. 11, Issue 18, 2021, 8502.
  - Mădălina Dumitriu, Dragoș Ionuț Stănică, *Study on the evaluation methods of the vertical ride comfort of railway vehicle - Mean comfort method and Sperling's method*, Applied Sciences, Vol. 11, Issue 9, 2021, 3953.
  - Mădălina Dumitriu, Dragoș Ionuț Stănică, *Effect of the anti-yaw damper on carbody vertical vibration and ride comfort of railway vehicle*, Applied Sciences, Vol. 10, Issue 22, 2020, 8167.
  - Mădălina Dumitriu, *A new approach to reducing the carbody vertical bending vibration of railway vehicles*, Vehicle System Dynamics, Vol. 55, No. 11, 2017, pp. 1787-1806.
  - Traian Mazilu, Mădălina Dumitriu, Cristina Tudorache, *Instability of an oscillator moving along a Timoshenko beam on viscoelastic foundation*, Nonlinear Dynamics, Vol. 67, No.2, 2012.
  - Traian Mazilu, Mădălina Dumitriu, Cristina Tudorache, *On the dynamic effect between a stability limit*, Journal of Sound and Vibration, Vol. 330, No.15, 2011, pp. 3729-3743.
- 1 brevet premiat prin Programul „Resurse umane, Sub-program „Premierea rezultatelor cercetării - Brevete” (PN-III-DCD-RU-PRECBT-2017-1): *Sistem de măsură și analiză a profilurilor de rulare a roților vehiculelor feroviare și metoda de măsurare*.
- Premiul “Gheorghe Silaș” - categoria articole științifice publicate în anul 2015, acordat de Societatea Română de Mecanică Teoretică și Aplicată (SRMTA) pentru articolul *Influence of the longitudinal and lateral suspension damping on the vibration behaviour in the railway vehicles* publicat în Archive of Mechanical Engineering, Vol. LXII, Number 1, 2015, pp. 115-140.
- 2 articole premiate la Innovative Manufacturing Engineering Conference IManE&E 2017, May 24-27, Iași, România:
  - Mădălina Dumitriu, Camil Crăciun, *Modelling of structural flexibility of the railway vehicles carbody*
  - Cătălin Cruceanu, Mădălina Dumitriu, Camil Crăciun, *About the influence of wheel slide protection devices action on longitudinal dynamic of trains*
- 1 articol premiat la Innovative Manufacturing Engineering Conference IManE&E 2018, May 31 - June 2, Chisinau, Republic of Moldova:
  - Mădălina Dumitriu, Marius Alin Gheț, *Evaluation of the vertical vibrations behaviour of the bogie at failure of the dampers in the primary suspension of the railway vehicle*

 Citări  
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- Web of Science - 357; SCOPUS - 636; Google Academic – 1060
- Web of Science: 11; SCOPUS: 14; Google Academic: 18; i10-index: 32